



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,267	09/10/2003	Helmut Schlessmann	A 91825	4017

7590 10/02/2006
Walter Ottesen
Patent Attorney
P.O. Box 4026
Gaithersburg, MD 20885-4026

EXAMINER

SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/658,267	Applicant(s) SCHLESSMANN, HELMUT	
	Examiner Jeffrey Sharp	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 8-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

[1] This action is responsive to Applicant's remarks/amendment filed on 18 July 2006 with regard to the Official Office action mailed on 18 April 2006.

Status of Claims

[2] Claims 1-13 are pending.

Claim Objections

[3] Claim 2 was previously objected to because of informalities. Applicant has successfully addressed these issues in the amendment filed on 18 July 2006. Accordingly, the objection to the claim has been withdrawn.

Claim Rejections - 35 USC § 112

[4] Claims 1-13 were previously rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has successfully addressed the issues of indefiniteness in the amendment filed on 18 July 2006. Accordingly, the rejection of the claims under 35 U.S.C. 112, second paragraph have been withdrawn.

Response to Arguments/Remarks

[5] Claims 1-6 and 13 were previously rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. US-5,906,477.

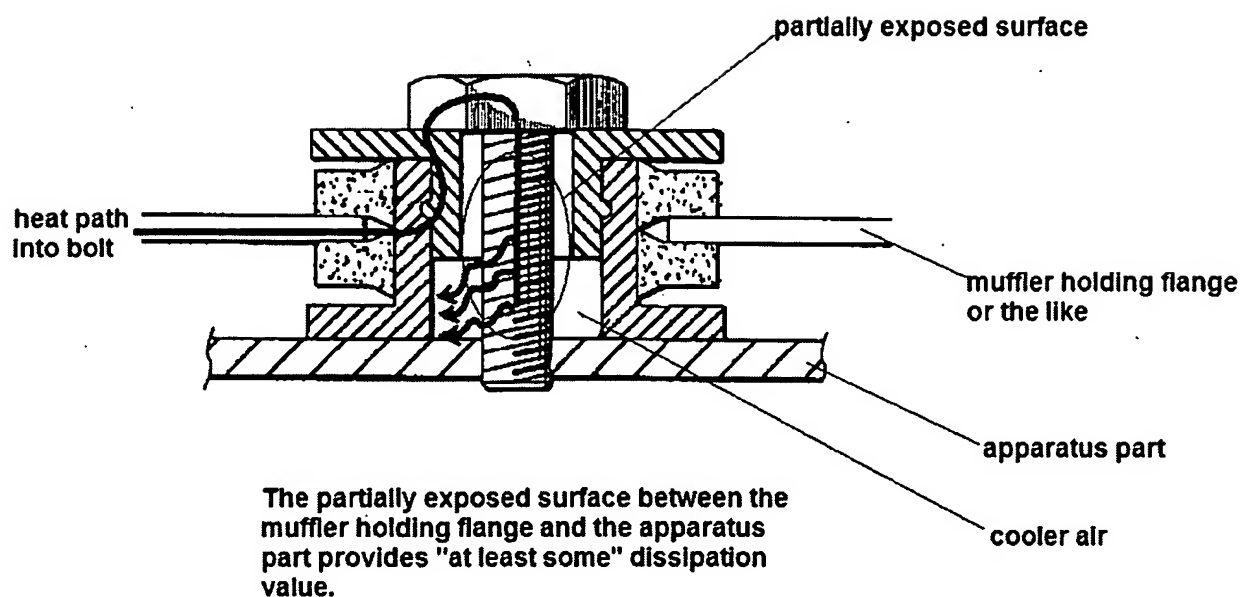
Applicant's arguments/remarks with regard to this rejection have been fully considered, but are moot in view of the following new grounds of rejection.

[6] Claims 1-4, 6, 7, 12, and 13 were previously rejected under 35 U.S.C. 102(b) as being anticipated by Niwa et al. US-6,328,513.

Applicant's arguments/remarks with regard to this rejection have been fully considered, but are not persuasive.

Applicant has argued that Niwa et al.'s attachment pin (27) does not exhibit at least a partially exposed cooling surface. Examiner respectfully disagrees. The partially exposed surface is exposed to air, and therefore, may be broadly construed as a cooling surface for conducting away "at least a part" of the heat, which is introduced from the muffler into the attachment pin via radiation and/or convection. While not explicitly taught in the reference, the attachment pin taught by Niwa et al. has the inherent capability to perform this functional limitation. Moreover, Applicant only claims "conducting away" heat. Since the location "away" is not precisely defined, "away" can mean "to any location other than the attachment pin".

Art Unit: 3677



[7] Claims 1-5, 8-11, and 13 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Rives US-5,333,978 in view of Niwa et al. US-6,328,513.

Applicant's arguments/remarks with regard to this rejection have been fully considered, but are moot in view of the following new grounds of rejection.

[8] Claims 1-5, 8-11, and 13 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Brown US-1,574,466 in view of Kim et al. US-5,906,477.

Applicant's arguments/remarks with regard to this rejection have been fully considered, but are moot in view of the following new grounds of rejection.

New Grounds of Rejection

Claim Rejections - 35 USC § 102

- [9] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

- [10] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- [11] Claims 1, 2, 4, 5, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Wieland US-5,243,764.

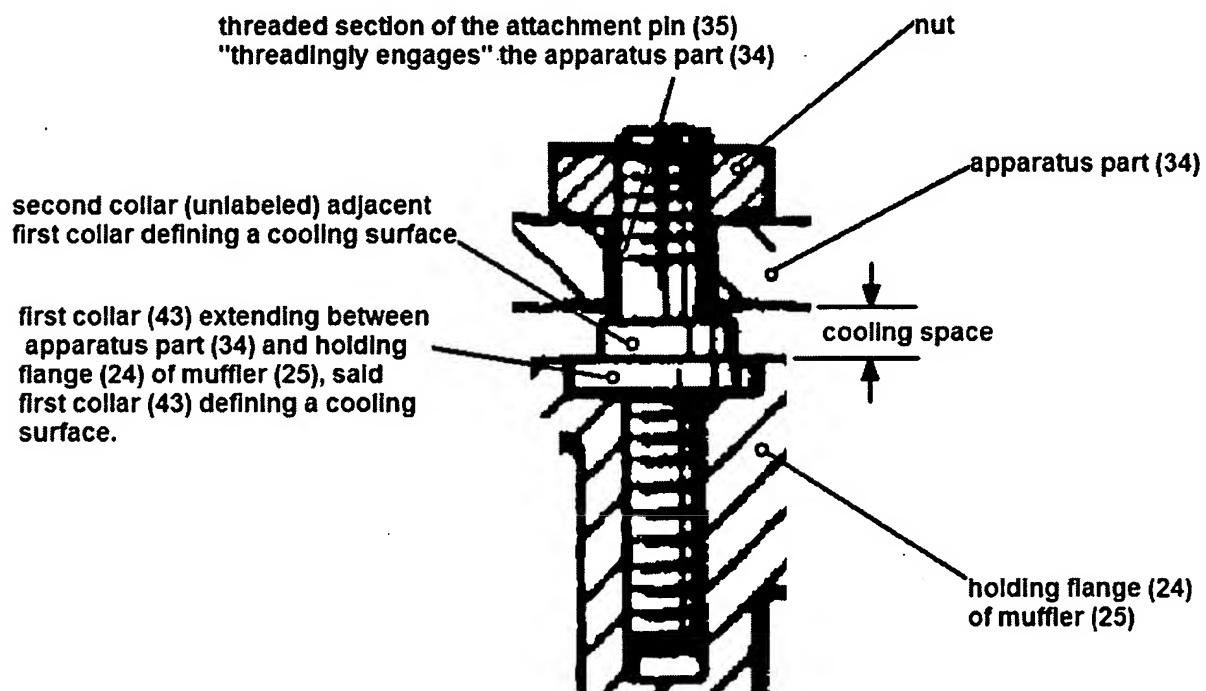
Refer to bottom left of Figure 2.

In short, and in its broadest reasonable interpretation, Wieland substantially teaches or at least suggests joining a holding flange (24) of a muffler (25) to an apparatus part (34) using a metallic attachment pin (35). The attachment pin has at least one threaded section that makes

Art Unit: 3677

threaded contact with the apparatus part (34) at (38). Therefore, in its broadest reasonable sense, the attachment pin (35) "threadingly engages" the apparatus part (34). The assembly comprises a nut (40). The attachment pin has two collars, a first (43), and a second (not labeled) adjacent the first, which inherently provide a cooling surface between the muffler and the apparatus part (34). The assembly is provided on a "portable handheld work apparatus".

See the below annotated figure showing that Wieland teaches or at least suggests every feature in claims 1, 2, 4, 5, and 13. Things clearly shown in reference patent drawings qualify as prior art features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).



Art Unit: 3677

[12] Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wieland US-5,243,764 in view of Brown US-1,574,466.

In short, and in its broadest reasonable interpretation, Wieland discloses or at least strongly suggests each and every limitation found in claims 1, 2, 4, 5, and 13 as discussed above. However, Wieland fails to disclose the collar having a slot extending peripherally about said attachment pin.

Brown suggests placing a slot (15c) in or between a collar(s) (15d) on an attachment pin, in order to provide a safety connection.

Therefore, especially since the apparatus part (34) taught by Wieland is in or around moving parts, it would be advantageous and obvious to one of ordinary skill in the art at the time of invention, to employ a slot extending peripherally about said attachment pin at the collar, in order to provide a safety connection. One of ordinary skill in the art, would further appreciate that such a slot taught by Brown would prevent over-torquing the nut (40) by allowing the attachment pin (35) to shear at a predetermined torque, determined by the diameter of said slot.

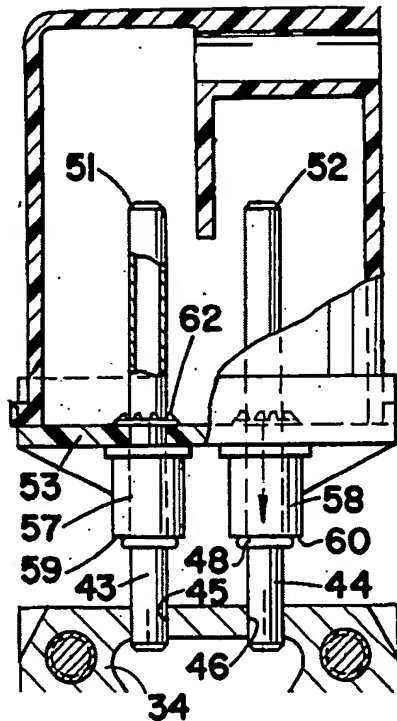
It is not required that the prior art disclose or suggest the properties newly-discovered by an applicant in order for there to be a prima facie case of obviousness. *See In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897, 1905 (Fed. Cir. 1990). Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. *See In re Beattie*, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976) and *In re Wilder*, 429 F.2d 447, 166 USPQ 545 (CCPA 1970). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated

Art Unit: 3677

into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F. 2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In this regard, a conclusion of obviousness may be based on common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

[13] Claims 1, 2, 4, 6, 7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritchman US-4,401,418 in view of Gehrig et al. US-4,304,503

In short, and in its broadest reasonable interpretation, Fritchman teaches each and every limitation found in claims 1, 2, 4, and 7, including an attachment pin (43,44) joining a muffler flange section (53) to an apparatus part (34). The attachment pin (43,44) has a partially exposed part being disposed between the apparatus part (34) and muffler (53), which defines a cooling surface (inherent). The attachment pin (43,44) further comprises a first collar (48) extending peripherally around the attachment pin, said collar (48) also inherently defining a cooling surface. A second collar (57,58) is positioned adjacent the first collar (48).



However, Fritchman fails to disclose expressly, the attachment pin (51,52) threadedly engaging the muffler (53), and is silent to forming the attachment pins from steel (only mentions plastic material).

Gehrig et al. suggest configuring one end of a double-ended attachment pin to threadingly engage with plastic or metallic substrate. This configuration would be advantageous to Fritchman, because it would eliminate the need for an extra part (washer 62) to join the attachment pin (43,44) to the muffler (53), which happens to be made from a plastic material. Gehrig et al. further suggests that a collar (16) on an attachment pin may be of circular or hexagonal shape, as a matter of aesthetic preference. Of course, one of ordinary skill in the art would readily appreciate that a hexagonal shape would advantageously provide a torque surface to the collar for facilitating removal of the attachment pin as is well-known in the art (see form PTO-892 for multiple references teaching this).

Art Unit: 3677

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art, to modify the assembly taught by Fritchman, to incorporate a threaded engagement between the muffler and the attachment pin as suggested by Gehrig et al., in order to eliminate the need for a separate part (e.g., washer 62).

It would have further been obvious to those of ordinary skill in the art, to provide Fritchman's collar with a hexagonal shape, as Gehrig et al. deems the two to be art recognized equivalents. A hexagonal profile would facilitate disassembly of the muffler and apparatus part, by providing a torque surface.

Lastly, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. It is also common knowledge to choose a material that has sufficient strength, durability, flexibility, hardness, etc. for the application and intended use of that material. In the instant case, Fritchman probably prefers plastic over steel, since it has better acoustical performance than metallic materials. Examiner takes the position that Fritchman would not discount steel as a probable or suitable material for an attachment pin.

Allowable Subject Matter

[14] After further consideration of the art, and in view of Applicant's amendment/remarks filed on 18 July 2006, claims 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3677

Conclusion

[15] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows: See form PTO-892.

[16] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

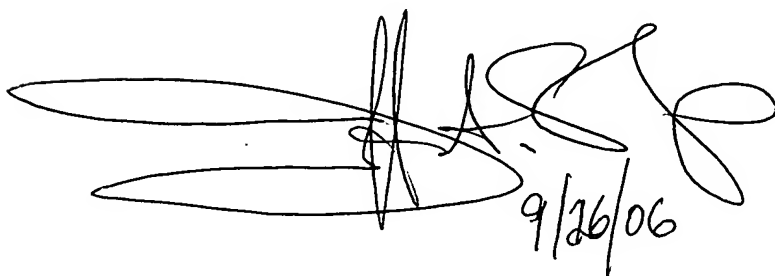
[17] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3677

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS

A handwritten signature in black ink, followed by the date 9/26/06.

Katherine Mitchell
Primary Examiner